

the Achieve funding requests. Because Achieve is able to guarantee this grant, Achieve is providing the applicants with a rebate of the applicant's share of the cost of the services in violation of program rules. Furthermore, Achieve has an unfair competitive advantage based on violating the rule that applicants not receive rebates for services or products purchased with universal service discounts from the service provider providing the services. Both the applicant and the service provider are responsible for these rule violations because the applicant was unable to conduct a fair and open competitive bidding process based on Achieve's no-cost guarantee, and Achieve had an unfair competitive advantage because Achieve guaranteed a no-cost service in violation of the rule that the service provider not provide a rebate to the applicant. USAC has determined that both the applicant and the service provider are responsible for this rule violation; if any funds were disbursed, USAC will seek recovery of the improperly disbursed funds from both the applicant and the service provider.

**E. FCC Rules And USAC Programmatic Guidance Regarding Grants To Cover Applicant Share Of Costs Of E-Rate Program Supported Services**

The FCC has identified grants or donations to E-Rate Program applicants as a permissible source of the resources that an applicant must demonstrate that it has in order to receive E-rate Program support (i.e., the applicant's non-discounted share).<sup>13</sup> However, there is no FCC rule or other policy statement that addresses the matter of such grants. USAC does not cite any in its Funding Commitment Adjustment Explanation.

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<sup>13</sup> *In re Requests for Review of the Universal Service Administrator by Academy of Excellence, Phoenix, AZ, et al.*, 22 FCC Rcd 8722 (2007) ("Academy Order"). In *Academy*, the FCC considered various appeals relating to Sections 54.504(b)(2)(vi) and (c)(1)(iii) of the Commission's rules requiring that applicants certify in part that they have access to the necessary resources to finance the non-discounted portion of the price of eligible services. While support for eligible services is conditional upon the applicant securing access to all necessary resources, the Commission determined that certain applicants did not violate FCC rules on necessary resources when they had a specific, reasonable expectation that they would secure funding through grants and donations even if they did not have a formal written commitment of such funds when they filed their Form 471. *Academy Order*, ¶¶ 7. The Commission directed USAC to consider the likelihood of the receipt of donations or specific grants for which an applicant has applied in determining whether an applicant has access to necessary resources. *Id.*, ¶¶11.

The SLD provides general guidance on grants on its web site. First, in addressing applicants' "Obligation to Pay Non-discount Portion," the SLD web site guidance states the following:

Some service providers offer to help applicants locate grants to pay for their non-discount portion. Program rules do not restrict applicants from accepting grants from bona fide organizations; nor do they restrict service providers from attempting to help applicants obtain grants from such organizations, so long as the grants or organizations are independent of the service provider.<sup>14</sup>

Second, in providing a "Free Services Advisory," the SLD web site guidance states, by way of example, the following:

Example 7: A service provider donates funds to a grant organization, earmarked for an applicant.

Assume that an applicant that qualifies for an 80% discount seeks an eligible technology upgrade that costs \$100,000. The service provider donates \$10,000 to a grant organization, with a stipulation for how the funds are to be disbursed in a way that violates program rules. For example, the stipulation could indicate that funds are to be disbursed to a particular school that has a funding request under the Schools and Libraries Program that cites that service provider. Because of the additional transaction involving the grant, the cost of the service is not truly \$100,000. A funding request for the full \$100,000 pre-discount cost is a violation of program rules.<sup>15</sup>

Achieve is aware of no other formal guidance or statement of policy by USAC or SLD on the subject.

## **II. BASIS FOR APPEAL**

SLD's justification for the COMADs is "Achieve's bids to applicants indicate that Achieve markets their service to applicants as a no cost service because Achieve is able to guarantee applicants that they will receive USDLA grants to pay their

<sup>14</sup> See <http://www.usac.org/sl/applicants/step11/obligation-to-pay.aspx>.

<sup>15</sup> See <http://www.usac.org/sl/applicants/step06/free-services-advisory.aspx>.

share for the Achieve funding requests. Achieve is therefore providing applicants with a rebate for the applicant's portion of the cost."

USAC failed to cite any specific language attributable to Achieve or Achieve documents that support its conclusion. It appears that the SLD mistakenly interpreted words such as "partnership" and "grant opportunity" in reaching its erroneous conclusion that Achieve indirectly paid Somerville's non-discounted share. SLD's conclusion is based upon pure conjecture and is wrong.

Achieve respectfully submits that SLD, after reviewing, considering and granting the Somerville applications, and presumably PIA and invoice reviews, has now rescinded the funding support by going beyond its own guidance regarding grants.<sup>16</sup> Moreover, SLD failed to cite to any FCC regulation or policy guidance, which it is required to do by law.<sup>17</sup>

The facts do not support SLD's conclusions. Based on the following analysis, the only fair and justifiable result would be the rescission of the COMADs and reinstatement of the funding previously approved.

**A. SLD's Asserted Partnership Between USDLA And Achieve Did Not Exist**

SLD's announced programmatic guidance on third-party grants states that they are permitted "so long as the grants or organizations are independent of the service provider." USDLA operates totally independently of Achieve.

USDLA is a member organization.<sup>18</sup> Achieve is not and has not been a member of USDLA; nor has any officer, manager, employee or owner of Achieve. No

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<sup>16</sup> In effect, SLD has applied a "new policy" here. Yet, the FCC has counseled USAC that it must provide sufficient notice for applicants to comply with a new policy. *See Requests for Review of Decisions of the Universal Service Administrator by Advanced Education Services, et al.*, 22 FCC Rcd 21513, 22516 ¶¶7 (2007).

<sup>17</sup> In making findings regarding rule violations the FCC has advised SLD that it must engage in a thorough examination before concluding that there were rule violations. *See, e.g., In re Request for review of Decisions of the Universal Service Administrator by Caldwell Parish School District*, 23 FCC Rcd 2784 (Wireline Compet. Bur. 2008); *see also In re Request for Review of the Decision of the Universal Administrator by Academy of Careers and Technologies et al.*, 21 FCC Rcd 5348 (2006). Moreover, where the Commission has yet to adopt a requirement, the FCC has said that USAC should not deny applications based on a failure to comply with that requirement. *See In re Requests for Review of the Decisions of the Universal Service Administrator by Aiken County Public Schools*, 22 FCC Rcd 8735, 8737 ¶¶6 (2007).

<sup>18</sup> *See* <http://www.usdla.org/becomeamember.php>.

representative of Achieve sits or has sat on the governing Board of USDLA, or its Advisory Board, or is or has been a “sponsor” or “affiliate” of USDLA as listed on USDLA’s web site. There is no partnership in any legal sense between USDLA and Achieve relating to solicitation of funds for or grants from USDLA’s Digital Divide Fund or otherwise. Achieve unequivocally represented this to SLD in response to SLD’s special compliance review.<sup>19</sup>

The COMADs state that SLD obtained information that indicates that Achieve has a partnership with USDLA. Achieve is aware that USDLA, in a 2006 Annual Report posted on the USDLA web site (“Report”), referred to a partnership with Achieve. The same Report uses the term partnership with respect to various other relationships with other companies that USDLA had developed during the course of the year.

Even assuming that USDLA perceived that Achieve was its “partner” in supporting the development and deployment of distance learning networks, including seeking funds for the Digital Divide Fund,<sup>20</sup> mere use of that term does not destroy the independent nature of the relationship between USDLA and Achieve. Achieve does not deny a common interest between Achieve and USDLA in the development and deployment of distance learning networks. But the mere use of the term, in the face of the lack of any role by Achieve in USDLA, does not and cannot establish the existence of the arrangement that SLD asserts justified the COMADs.

Achieve finds SLD’s conclusion presented in the COMADs that there is a lack of independence between Achieve and USDLA even more troubling in light of other grant arrangements that clearly challenge credulity in terms of their independent nature. For example, equipment manufacturers, including some members of USDLA such as Tandberg and Polycom, have their own “in-house” grant programs that are available to applicants who seek E-Rate Program support for this equipment that is actually provided through the manufacturers’ affiliated value-added resellers or distributors who participate in the E-rate program.<sup>21</sup> Of course, there is absolutely no such relationship between Achieve and USDLA with respect to the offering of any grants.

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<sup>19</sup> Letter from Joy Jackson, President, Achieve Telecom Network of Massachusetts, LLC, dated July 18, 2008, to Jennifer Cerciello, USAC, at p. 1 (“Jackson Letter”), attached to the Declaration of Joy Jackson which is Exhibit 4.

<sup>20</sup> Achieve did not play any role in the preparation of the Report or any other USDLA Report.

<sup>21</sup> See Exhibit 5 for reference materials on such programs.

**B. The Announced SLD Programmatic Guidance Does Not Prohibit A Service Provider's Solicitation Of Funds On Behalf Of A Grant Organization**

The SLD's programmatic guidance on grants does not prohibit a service provider from soliciting funds on behalf of a grant organization. In fact, the guidance does not even prohibit a service provider from making a donation to such an organization itself. Moreover, if the service provider made such a donation, the guidance does not prohibit subsequent grants to E-Rate Program applicants who elect to use the services of the donating service provider. What is prohibited in the programmatic guidance is a service provider who donates funds with the stipulation that the "funds are to be disbursed to a particular school that has a funding request under the Schools and Libraries Program that cites that service provider" (i.e., that the funds be "earmarked" for that applicant).

SLD's programmatic guidance on service provider contributions is not invoked here. Achieve made no donations to the Digital Divide Fund; nor did any Achieve officer, manager, employee or owner.<sup>22</sup> Achieve had ZERO control over how USDLA grants were administered and funded. USDLA independently made those decisions as a national trade association.<sup>23</sup>

As an active and committed provider of distance learning services in the educational market, Achieve solicited third party contributions to USDLA's Digital Divide Fund. Achieve also provided USDLA with contact information about prospects, so that USDLA could solicit them directly. Achieve did not receive any reports from USDLA about which entities contributed to the Digital Divide Fund or in what amounts they may have made contributions.<sup>24</sup> Again, SLD programmatic guidance does not prohibit such solicitation. SLD failed to prove that there is any nexus between potential donations made to the USDLA Digital Divide Fund or USDLA by third parties over who Achieve has ZERO control and grants awarded to any of Achieve's customers. The reason is simple. There is no evidence that could possibly support SLD's justification, because it does not exist.

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<sup>22</sup> Jackson Letter, p. 1.

<sup>23</sup> SLD's finding that somehow USDLA and Achieve did not operate independently of one another is unlawful. USDLA presumably adheres to antitrust procedures.

<sup>24</sup> Achieve was not aware of the other donors to the Fund. Achieve does not know the total amount contributed to the Fund.

**C. USDLA Specification Of Use Of The Grant For Achieve Services Does Not Mean That USDLA Funds Were Earmarked For Applicants Specifying Achieve**

Building on the existence of an unspecified “partnership” and solicitation of funds, SLD notes that “USDLA then provides grants to applicants to use to pay their non-discount share, which is specifically designated for Achieve’s funding requests.” Such activity is permissible. Indeed, the FCC has clearly stated in the *Academy Order* that such grants may be awarded to pay an applicant’s non-discounted share of funding requests.

Again, Achieve only made schools aware of the USDLA grant opportunity. USDLA had total control of receipt, review and funding of any grant applications. Indeed, in certain cases, the USDLA grant letter stated that “while you may have been referred to USDLA by a vendor for this project, please understand that our grant is to your school district and is not dependent on the selection of any specific service provider.”<sup>25</sup> So SLD’s claim that grants were always earmarked for Achieve’s customers based upon some unidentified and mysterious SLD notion that Achieve had an exclusive arrangement because of its solicitation efforts is incorrect.

Any decision by USDLA to specify that a grant could be specifically used for Achieve’s services was USDLA’s decision. Achieve did not participate in the grant process, which was controlled and handled completely by USDLA. Achieve did not dictate what the grant applicants included in their applications. So any such specification by USDLA does not warrant a finding that there was an impermissible *quid pro quo* associated with Achieve’s solicitation of funds.

Achieve unequivocally declared to SLD that Achieve’s efforts regarding the solicitation of funds are “not pursuant to any partnership or agreement or understanding between Achieve and USDLA or its officers relating to grant applications from applicants specifying Achieve services.”<sup>26</sup> In addition, Achieve attested that it does not have any “understandings or agreements with potential donors as to conditions relating to USDLA’s use of the funds that donors should place on any donation that they might make....”<sup>27</sup> The COMADs offer no other support for the conclusion that such specification, where it does occur, is evidence of an earmark arrangement.

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<sup>25</sup> See, e.g., Exhibit 2.

<sup>26</sup> Jackson Letter, at p.1.

<sup>27</sup> Jackson Letter, at p.1, 2.

**D. Achieve's Bids To Somerville Did Not Market A Guaranteed "No Cost" Service**

SLD next asserts that Achieve's "bids to applicants indicate" that Achieve's is a "no-cost" service, because it is able to guarantee applicants that they will receive USDLA grants for the applicant's share of a funding request for Achieve's services. SLD has chosen not to reveal what documents it considers to comprise Achieve's "bids to applicants."

However, Achieve has attached hereto its response to the operative FCC Form 470s. These are the only "bids" submitted by Achieve to Somerville in connection with the applicant's request for services. Nowhere in these "bid" documents is there any reference to USDLA or the availability of grants from USDLA or any guarantee of a grant from USDLA. Nor does the proposal reflect that Achieve is marketing its service as guaranteed "no cost" to the applicant.

In Achieve's marketing materials, Achieve indicated that there was an "opportunity" to obtain a grant from USDLA. Marketing materials and notification of a grant opportunity are not bid documents and hardly rise to the level of a competitive bid violation under the E-Rate Program. In addition, an "opportunity" to apply for a grant is not a "guarantee" that the application for the grant will be accepted. Advising applicants of grant opportunities is specifically permitted by the SLD's current guidance on grants.<sup>28</sup>

Achieve has previously attested that it "does not market its service as a 'no-cost' service" and "has no control over whether a grant will or will not be made."<sup>29</sup> Achieve also previously attested, there was no agreement between USDLA and Achieve guaranteeing the grant of applications received from applicants specifying Achieve's services. This cumulative evidence refutes SLD's claims that Achieve makes such guarantees, in its bids, marketing or promotional materials, or elsewhere.

**E. Achieve Did Not Rebate Or Waive The Applicant's Share Of The Cost Of Its Services**

SLD characterizes the "guaranteed" USDLA grant as a "rebate" by Achieve of the applicant's portion of the cost of Achieve's services. By definition, a "rebate"

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<sup>28</sup> See Section I.E, *supra*.

<sup>29</sup> Jackson Letter, at p. 2.

involves the “return” of portion of the normal charge imposed by the service provider<sup>30</sup>, whether through a discount, free service, promotion or, in the most glaring case, funds provided by the service provider. Yet, Achieve has contributed no funds to the Digital Divide Fund. To the extent that third parties, even if encouraged by Achieve to do so, made contributions to the Fund, which were then dispensed by USDLA to the applicant, they are not being provided by Achieve either directly or indirectly through USDLA. Moreover, Achieve is aware that USDLA made it clear to grantees that its grant award was not guaranteed but was subject to the availability of funds.<sup>31</sup>

SLD also claims that by dint of the alleged guarantee Achieve has impermissibly waived the requirement that the applicant pay its portion of the cost of Achieve’s service. Yet SLD’s own programmatic guidance and FCC policy concedes that a third-party grant is an acceptable method for an applicant to cover its share of the cost. The grant funds awarded by USDLA to cover the applicant’s share were awarded to the applicant. Once awarded, these funds belonged to the applicant, not Achieve. After receiving the grant, the applicant had the right to use these monies to pay its non-discounted share. For SLD to conclude otherwise is wrong. Achieve never waived the applicant’s share and never provided a portion of its services for free. The applicant paid its share through funds provided by the grant.

Achieve respectfully submits that SLD’s conclusion that a guarantee of a third-party grant constitutes a rebate provided by the service provider is not grounded in any announced SLD programmatic guidance or FCC rule or policy. There has been no such rebate. Nor has there been any waiver of the responsibility of the applicant for its share of the cost of Achieve’s services.

**F. Achieve Gained No Unfair Competitive Advantage**

Achieve respectfully submits that the foregoing demonstrates that SLD’s theory of a *sub silentio* arrangement that permitted Achieve to guarantee USDLA grants cannot be sustained. There were no Achieve claims of no-cost based on a guarantee of a USDLA grant. The Achieve “bid” material (i.e., its Form 470

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<sup>30</sup> The standard definition of a rebate is a deduction from an amount to be paid or a return of part of an amount given in payment.

<sup>31</sup> See, e.g., Exhibit 3. Moreover, to the extent that there were other contributions to the Digital Divide Fund, not resulting from Achieve’s solicitations or referrals, that were used to pay grants, there is no connection with Achieve at all.



response) makes no such claim. Since that was the foundation on which SLD's assertion of unfair competitive advantage rested, that claim, too, must fall.<sup>32</sup>

### **III. CONCLUSION**

SLD has not made its case for rescinding previously approved funding made after full disclosure and review of the relevant applications based on any rule violation. Achieve gave no money to the Digital Divide Fund, is not even a member of USDLA, has no control over how funds from the Fund are dispensed.

For the reasons and arguments set forth above, USAC should find in favor of Achieve, grant this Appeal, cancel the COMADs and promptly pay any outstanding unpaid Achieve invoices to USAC for the recurring services that Achieve provided to Somerville during Funding Years 2005 and 2006.

### **IV. CONTACT PERSONS**

The contact persons for this appeal are Paul C. Besozzi, Cynthia B. Schultz and Jennifer A. Cetta, Patton Boggs LLP, 2550 M Street, N.W., Washington, D.C. 20037, Tel. Nos. 202-457-5292 (Paul), 202-457-6343 (Cynthia) and 202-457-6546 (Jennifer), Fax No. 202-457-6315 and e-mail addresses [pbsozzi@pattonboggs.com](mailto:pbsozzi@pattonboggs.com), [cschultz@pattonboggs.com](mailto:cschultz@pattonboggs.com) or [jcetta@pattonboggs.com](mailto:jcetta@pattonboggs.com).

Sincerely,



Paul C. Besozzi  
Cynthia B. Schultz  
Jennifer A. Cetta  
Counsel for Achieve Telecom Network of Massachusetts, LLC

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<sup>32</sup> SLD has cited no evidence that other bids were not considered because of the allegations of non-compliance with the rules cited herein. See generally, *In the Matter of Application for review of the Decision of the Universal Service Administrator by Aberdeen School District*, 22 FCC Rcd 8757, 8782 ¶19 (2007).

# **EXHIBIT 1**



## **Somerville Public Schools**

*Response to 470 Application Number*

**369910000481788**



December 22, 2003

Mr. Tim Egan  
Somerville Public Schools  
181 Washington Street  
Somerville, MA 02143

Subject: Response to 470 Application Number: 369910000481788

Dear Mr. Egan:

Achieve Telecom Network SPIN Number 143026761 is pleased to submit this response to 470 Application 369910000481788 to Somerville Public Schools for review and consideration for your request of Distance Learning Infrastructure. We are confident in our ability to successfully complete this engagement and welcome the opportunity to showcase the value we bring our clients.

In support of these goals, please reference the attached proposal, which documents the scope of work, pricing and specifications.

If you have any questions with regard to the attached proposal or need any further assistance please feel free to contact me via cell at 865-414-6624 or toll free at 866-538-5212.

Sincerely,

Joy Jackson  
President



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## 1. Executive Summary

The Achieve Telecom Network's distance learning transmission service, called AchieveXpress, is a comprehensive telecommunications service that permits video, audio and text to be transmitted from one site to one or more sites for use by emergency management, corporations, government facilities, educational institutions or libraries. The telecommunications services of AchieveXpress are used to electronically deliver training and instructional materials and other data to equipment provided by Achieve Telecom that is then connected to the Customer's local area network. Achieve Telecom provides AchieveXpress as a fully managed telecommunications service and can use existing Customer bandwidth for delivery or provision additional terrestrial or satellite connectivity.

The AchieveXpress solution provides infrastructure solutions for distance learning and other applications that require multi-media formats and delivery of all media and content to multiple locations. The AchieveXpress solution significantly enhances the security, reliability, quality and manageability of distance learning applications and content. In addition, AchieveXpress enables K-12 school districts and other customers to move information close to every targeted end-user and enhance overall learning by synchronizing information across the entire district. The underlying premise of AchieveXpress is to, "Get valuable information where it is needed, when it is needed in a secure, reliable and high quality manner that eliminates any management responsibility for school personnel."

AchieveXpress provides a limited suite of applications, focused on the critical need for authentication and authorization. The key feature of DLTS is the underlying infrastructure that enables school-selected applications to provide users with the maximum benefit and increase the K-12 school district's ability to shared high-quality resources (video, audio and text assets) across the entire teaching and learning spectrum and across all grades, teachers and students by means of this distributed network service. AchieveXpress does not provide any of the content that is to be delivered, but rather provides the transmission circuit over which this delivery shall take place. Achieve Telecom will provide the Customer with the information necessary to format Customer-provided or Third-Party content for use over the AchieveXpress network.

Educational resources and training via AchieveXpress can be delivered live or on-demand and at the quality that teachers and students expect from cable TV-like experiences. Teachers and students can access educational material collectively in a central school location or individually from their school, office and home computers. AchieveXpress also provides an integral relay closure capability that can be used to trigger an emergency alert notification, called Achieve Alert.

Achieve Telecom delivers AchieveXpress as a managed telecommunications service. Schools and libraries are eligible for funding discounts by the Federal E-rate program that provides between 20% and 90% of the total cost to eligible K-12 schools and libraries.

## 2.0 Overview of Achieve Telecom Network Products and Services

The AchieveXpress service provides robust Internet Protocol ("IP") delivery across a Wide Area Network ("WAN") that in turn provides a single point of access to the customer's Local Area Network ("LAN").

AchieveXpress is the product of Achieve Telecommunications Network of MA ("Achieve Telecom") a registered telecommunications service provider in the Commonwealth of Massachusetts that provides distance learning transmission networks as a tariffed common carrier to business customers across the United States. Achieve Telecom is an inter-exchange carrier within the Commonwealth of Massachusetts subject to the review and regulation of the Massachusetts Department of Telecommunications and Energy. This same service is also offered on an inter-state basis, as identified in Achieve Telecom Network's Form 499-A filing with the Federal Communications Commission.

### AchieveXpress

#### *Achieve Telecom Network's Distance Learning Transmission Service*

The Achieve Telecom Network's Distance Learning Transmission Service, called AchieveXpress, is a comprehensive telecommunications service that permits video, audio and text files to be transmitted from one site to one or more sites for use by corporations, government facilities, educational institutions, or libraries.

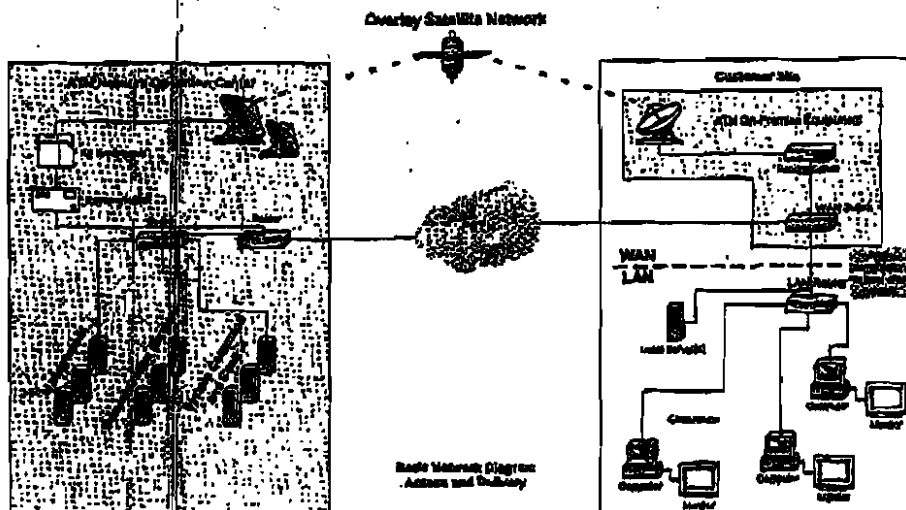
The telecommunications services of AchieveXpress are used to electronically deliver instructional materials and other data to equipment provided by Achieve Telecom that is then connected to the Customer's local network.

AchieveXpress does not itself provision the content that is to be delivered, but rather provides the transmission circuit over which this delivery shall take place. Achieve Telecom provides the Customer with the information and protocols necessary to format the content for use over AchieveXpress. The Customer is responsible for providing content, whether it is Customer-owned or provided by other Third Parties, and the Customer is responsible for ensuring that all content placed on the Achieve Telecom's network is appropriately licensed for this use.

Achieve Telecom's Network Operations Center (NOC) is located in Massachusetts. Circuit connectivity is provided over the Public Switched Telephone Network (PSTN) and, depending on the bandwidth needed for the transmission of digital signals, is augmented by a private satellite overlay network. At a minimum 5mbps of bandwidth is provided.

The comprehensive AchieveXpress option provides access to Achieve Telecom's transmission facilities and is capable of supporting high-speed data signals used for such applications as distance learning. In addition, AchieveXpress is delivered with the Achieve Alert functionality (described in detail below).

The basic system architecture for AchieveXpress is shown in the following diagram:



In simple but powerful terms, AchieveXpress creates the delivery highway over a WAN for multimedia content to the customer's LAN for use by identified learners.

The AchieveXpress service, as shown in the diagram above, is composed of the following five (5) key elements:

1. **Network.** The service includes satellite and terrestrial networks for distributing content and for quickly accessing the Internet. Typically, the service is deployed with a terrestrial WAN, providing virtual LAN connectivity between schools in the district. This network may be augmented by the satellite network, multicasting video and associated teaching content from an uplink at the NOC to satellite receivers at the schools. Bandwidth on this network will be provisioned to support the aggregate usage and will initially be configured for 5 Mbps (burstable).
2. **Network Operations Center.** The NOC provides overall network management and control.
3. **School equipment.** The AchieveXpress equipment installed at each school receives the content delivery, interfaces with the WAN, stores the delivered content and then re-serves it on-demand over the LAN to the students and teachers.
4. **Achieve Alert.** This comprehensive emergency notification system is provided as an installed feature of AchieveXpress.
5. **Equipment installation and service.** The AchieveXpress solution provides full installation, support, and help desk/maintenance services as well as associated documentation, IT staff and end user training as a fully managed service.



This is a complete turnkey end-to-end distance learning service that can be combined with rich media educational videos and lessons from third-party distributors designed to take advantage of the latest educational technologies.

AchieveXpress includes:

- **Achieve Alert for Emergency Notification Services**

AchieveXpress provides an emergency notification service, called Achieve Alert. The Achieve Telecom network provides an integral relay closure capability that can be used to trigger emergency notification and then specific follow-up directions and instructions to all user devices on the network. An example of an expected use would be for the statewide or local emergency manager to initiate an alarm to all schools on the network that directs all users to await further instructions over the Achieve Telecom network, to tune the television to a predetermined channel, or to go to predetermined web site. The Achieve Alert system is maintained at the NOC and may be accessed for the emergency notification by at one or more pre-determined agencies, such as the Superintendent of the School District, emergency response organizations at the Federal, State or Local level. The unique architecture of the Achieve Alert system provides for high levels of customization of Command and Control operations to the specifications of the designated agencies. In addition, multiple emergency responses by scenario can be crafted for each participating school district on the network as required, and the Achieve Alert system maintains the authorization and authentication protocols of the AchieveXpress network.

- **TutorXpress for Instructional Support to Students on State-Mandated Tests**

AchieveXpress provides TutorXpress with the resources to facilitate one-on-one and one-on-many interactive conferencing functions over the AchieveXpress network. This conference functionality can be used by School Districts to provide rigorous tutorials on the structure and format of the State graduation test, on the required content and on the specific student weaknesses that have been identified. Tutoring can be conducted in off-hours by regular teaching faculty who connect to the student(s) via the conferencing functionality of the network and partnerships are available with colleges on a local or national basis to provide additional tutoring resources.

### 3.0 AchieveXpress Technical Specifications

This section provides the system specifications for the AchieveXpress service.

#### > On-Premise Equipment

The specifications for the hardware and software to be installed in each customer site are described in this section. At each site, the following complement of equipment will be provided:

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#### o Satellite Dish Receiver

A Ku-band satellite receiver dish, with an aperture of approximately 1.5m, will be installed at each school in districts that require a satellite overlay network for robust content delivery. The satellite dish's LNB output will be fed to the distribution server for demodulation and digitization.

#### o Routing servers

A routing server will be installed in the school's data closet. Achieve Telecom has selected its routing server for its performance, breadth of functionality, and manageability as follows:

- Reception of video and other education materials via the satellite downlink and/or terrestrial network. The routing server shall include the capability to receive multicast distributions that have been transmitted via a reliable, compressed format and to automatically reconstruct and request any missing transmissions. Content may be periodically refreshed by the central distribution server, which transmits only the changes that have been made. Any change in content on the origin servers is automatically reflected throughout the network.
- Storage of videos and related educational material for playback over the school's LAN. Storage shall be configured in a RAID 5 (Redundant Array of Independent Disks) manner, such that failure of any single disk does not cause loss of content or a system failure. Video storage shall be sufficient to store at least 250 titles (125 hours), where the average title is 30 minutes long and encoded at 1 Mbps (approx. 80 GB).
- Routing server streaming functionality. The delivery server shall stream high quality video over IP using an embedded application-layer Windows Media Technology server. This server shall stream videos encoded in Windows Media format to end users, controlling bandwidth and connection quality while enabling videos to be played even when the Internet connection to the NOC is not operational. Additionally, the server shall support both MPEG1 and MPEG2 video streaming to end user PCs.

The Achieve Telecom routing server supports overall service and content management, by providing the hosting center with the following information:

- Periodic status updates, reflecting the health of the server and associated applications;

- Remote configuration interface, enabling Achieve Telecom to centrally configure and control the equipment from the hosting center and to remotely distribute software upgrades to the system;
- Content usage data, identifying who saw what, when, and with what quality;
- Content status storage utilization, identifying content stored on the Achieve Telecom server;
- Connectivity between the Achieve Telecom server and the school's LAN shall be via a 100 Base-T Ethernet interface. The Achieve Telecom server shall provide an additional Ethernet interface to provide additional or redundant connectivity to the LAN or to a remote site. The school's infrastructure should provide a minimum of one switched Ethernet connection to each classroom, WAN connectivity to the Internet and a public IP address.

The routing server shall be interoperable with the content distribution, webcasting authentication, network management, remote administration, and log aggregation protocols employed by the NOC central routing server used by the network operations and hosting service.

#### ➤ Installation Kit -

Achieve Telecom will install the equipment, and provide the necessary hardware to support this installation, including the following:

- Satellite receiver antenna and roof or exterior wall mounting kit. (If required)
- Routing server with mounting hardware. The routing server will be available either in a router card, 1 RU (1.75") EIA standard rack-mount or in a tower configuration. During the installation survey, a determination will be made as to the best configuration for each school or library.
- Cabling between the routing server and the a) satellite receiver antenna, b) access router, and c) LAN switch.

#### Achieve Alert for Emergency Notification Services

Achieve Alert is an integrated content delivery system that provides a comprehensive approach to emergency response and management. Achieve Alert delivers critical alerts, relevant information, and proper response training with public Internet and private network solutions.

Achieve Alert provides:

- Comprehensive approach to emergency response and management
- Delivery of critical alerts, relevant information, and proper response training
- Delivery on-time and to identified targeted audiences
- Security of a private network
- 24/7 emergency notification service

The Achieve Alert network provides an integral relay closure capability that can be used to trigger emergency notification and then specific follow-up directions and instructions to all personal computers and other user devices on the network. An example of an expected use would be for the statewide or local emergency manager to initiate an alarm to all customers on the network that directs all users to await further instructions over the Achieve Telecom network, to tune the television to a predetermined channel, or to go to predetermined web site. The Achieve Alert can be initiated at the NOC and/or from designated management points in the customer WAN/LAN configuration, such as Emergency Response Managers at the Federal, State or Local level and/or the Superintendent of the School District.

**Key features of Achieve Alert:**

- Delivery from our NOC or alternative site(s) as designated
- Emergency signals may be transmitted in video, audio or data formats
- Additional emergency instructions may also use multiple formats
- Delivery of the alert signal to all individual user interfaces on the network
- Full archiving, tracking and report generation
- Authorization and authentication protocols of the AchieveXpress network

The unique architecture of the Achieve Alert system provides for high levels of customization of Command and Control operations to the specifications of the designated agencies. This allows multiple emergency responses by scenario to be crafted for each participating customer, Emergency Management headquarters, public health center, and school district, as required. In addition, the Achieve Telecom bandwidth, both terrestrial and celestial, may be made available for comprehensive and immediate notices from senior officials of the state and/or local emergency authorities.

**Key Benefits of the Achieve Alert system:**

- Customizes and coordinates Emergency and Contingency Planning
- Improves Emergency Response Time and Performance
- Records the Actions taken
- Ready to be Deployed today

**Achieve Alert Functionality**

Achieve Alert provides functionality for emergency notification and rapid information transmission and access to Achieve Telecom's transmission facilities. Achieve Alert supports high-speed video, audio and data signals that may be used to notify users on the network of an emergency, transmit comprehensive instructions and procedures in a distance learning modality. The Achieve Alert system maintains the authorization and authentication protocols of the AchieveXpress network.

## 4.0 Achieve Telecom's Solution Partners

### 4.1 Dimension Data North America Overview

Dimension Data is a \$2 billion global technology services company. Dimension Data understands, builds and manages the applications and networks that power your organization. Unlike other IT services companies, Dimension Data has a unique combination of specialist skills and solutions to converge applications and networks. The result is a better return on your IT expenses.

We recognize to be effective, organizations need to collaborate seamlessly, both internally and with others. Effective partnering has helped organizations in both the public and private sectors become leaders in their community and among their peers- but achieving and maintaining that position isn't easy. These organizations know that getting the enabling technology right can mean the difference between success and failure. Dimension Data builds and manages the IT infrastructures that enable organizations to collaborate like market leaders.

Dimension Data employs more than 700 technical staff in the United States, with US headquarters in Reston Virginia. Dimension Data has offices in 30 countries and nearly 10,000 employees worldwide. A financially stable, mature solution provider. Dimension Data was established in 1983, is traded on the London Stock Exchange (symbol DDT) and is a member of the FTSE 250.

Dimension Data partners with industry specialists, such as Achieve Telecom to create vertical industry specific solutions. Dimension Data partners with leading technologies innovators, including Microsoft, Cisco, and EMC to build the infrastructure on which these solutions operate. The group holds elite certifications from each of these suppliers, with an emphasis on providing technical, professional and managed services to ensure our clients see optimal performance and return on their investment in these technologies.

#### Of Particular Relevance:

**Educational Expertise:** Dimension Data's commitment to the education market has been sincere and effective. In the past six months, Dimension Data has provided IT solutions to 48 Colleges and Universities, 26 elementary and secondary schools, 16 Junior Colleges and 5 major libraries.

**Using technology to educate in urban environments:** Our commitment to helping these organizations tap the power of emerging technologies to extend educational opportunities to those in urban environments is evident in our recent work on behalf of the Boston Public Library. ([http://newroom.cisco.com/dlts/ts\\_082203.html](http://newroom.cisco.com/dlts/ts_082203.html))

- **Driving user adoption:** The Nielsen Norman Group, a world authority on Web usability, reviewed more than 100 intranets and recognized Inside, the ChevronTexaco intranet site designed by Dimension Data, in its third annual list of top ten intranets worldwide. We feel system usability is a critical component to the success of any educational system. Dimension Data brings design and usability expertise to our engagements.  
[http://www.didata.com/na/news/news\\_pr102203.asp](http://www.didata.com/na/news/news_pr102203.asp)
- **Financial Stability:** business stability is critical element to selecting any IT partner. Dimension Data is a \$2 billion company that has been in business since 1983, and as a public company, we provide full disclosure of our earnings.  
[http://www.didata.com/investors/inv\\_reports.asp](http://www.didata.com/investors/inv_reports.asp)

#### 4.2 Cisco Systems, Inc. Overview

Cisco Systems, Inc. is the worldwide leader in networking for the Internet. Cisco's Internet Protocol-based (IP) networking solutions are the foundation of the Internet and most corporate, education, and government networks around the world. Cisco provides the broadest line of solutions for transporting data, voice and video within buildings, across campuses, or around the world.

Achieve Telecom uses Cisco content networking technologies in the delivery of our solution. The Cisco content networking portfolio, which includes both Layer 4-7 switching and content delivery network (CDN) products, helps business by enabling new applications and maximizing the agility and resilience of e-business infrastructures. Content networking complements and extends Cisco traditional Layer 2-3 network services by providing a higher level of security, availability, scalability, and manageability.

Cisco content networking devices add a layer of intelligence to the IP infrastructure to optimize Website performance, deliver content more efficiently, ensure content availability and security, and scale Websites and content-delivery systems. Cisco content networking provides a comprehensive end-to-end content-networking solution.

### 5.0 AchieveXpress with Achieve Alert

#### *The User Experience in K-12 Education*

The following paragraphs describe the process flow of the AchieveXpress service from the K-12 education user point of view:

The AchieveXpress service provides teachers with access to the central content library where an extensive yet easily searchable virtual library of educational video content and related teaching materials are available to support both classroom and individual instruction. When teachers find titles of interest, they can preview the content from the central library via the school network and then request that the specific content title be delivered to the Achieve Telecom routing server at their specific school building. Lessons, video content and associated tests are viewed in a full-screen, digital cable-quality experience from either a PC for individual student use or via television or projector delivery for group viewing. The AchieveXpress system provides the school system with the tool to create interactive distance learning programming that can be hosted on the Achieve Telecom server at the school or at the Network Operating Center ("NOC").

➤ Key features of the AchieveXpress service are as follows:

- Educational content, the AchieveXpress portal and the learning applications are stored and managed at the NOC, central content libraries or hosting service providers;
- Interactive distance learning programs can be created and distributed
- From a PC at school or at home, teachers are able to order video content to enhance their lessons, construct curriculums and lesson plans according to state requirements and the teacher's learning objectives

➤ Instructors and curriculum developers are able to:

- Play videos or video clips on demand that are ordered from the central library and then stored for use on the server at their facility
- Produce effective learning materials and with integrated testing to measure learning for each student
- Deliver courses in the classroom or via distance learning
- Monitor and manage each student's learning process
- Share lesson plans and content with other instructors on the network
- Easily and quickly integrate video content into lessons using the AchieveXpress portal

➤ AchieveXpress Portal Interface for the User

The AchieveXpress portal integrates a video library browser, distribution and playback tool with web-based lesson management. The portal is a web-based tool that is accessed by teachers and students using the Microsoft Internet Explorer browser.

The AchieveXpress video management service brings the highest quality education media to the classroom, and does so by employing the following functionality:

- o **Browsing.** Teachers may browse the video title selection available at both the hosting center and school, searching by applicable grade level, course, keyword, etc. The browser displays available information describing the video, its constituent clips, and run lengths.
- o **Preview.** During course preparation, teachers may view the video for applicability, and select that video for incorporation into the lesson activity from either her computer at school or at home.
- o **Order and reserve.** One day prior to using the video in the class, the teacher should check if the video is available at the school. If the title is not at the school, the teacher may order the video for delivery from the NOC to the routing server in the school. Teachers can order as many videos as they need - there are no additional charges associated with this ordering process. To ensure that their video is available the day of the class, teachers may reserve the video for a period of time. Unreserved videos may be automatically deleted by the system to provide space for new requests.
- o **Play.** Videos that are at the school may be played with full VCR-like commands and will be streamed from the AchieveXpress server at the school.

➤ **Network Connectivity**

The AchieveXpress service will provision each customer site with the following connectivity: Terrestrial connectivity with an additional satellite overlay network (if required) WAN with a minimum of 5 Mbps (burstable), dedicated to the transmission of content to the schools.

➤ **Achieve Alert**

The AchieveXpress service provides a 24/7 alert system, called Achieve Alert to all personal computers that are connected to the Achieve Telecom network. Depending on the protocols as agreed with the customer, the alert can be initiated from the Achieve Telecom NOC and from a designated management point in the customer WAN/LAN configuration. The alert would direct users to prepare for an announcement over the Achieve Telecom Network or point the user to a designated Cable TV, Internet or telephonic location for emergency reports and directions. In addition, the Achieve Telecom bandwidth, both terrestrial and celestial, may be made available for comprehensive and immediate notices from senior officials of the state and/or local emergency authorities.



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## **6.0 AchieveXpress Customer Requirements**

### **6.1 AchieveXpress Minimum Requirements: School, School District or Library**

#### **Stand-alone location**

**(Not part of a district of schools or library system interconnected by a WAN)**

#### **Dedicated Internet access**

The minimum Internet access requires a "dedicated connection." A dedicated connection is a connection that has access to the Internet at all times, not a dial-up connection. Connections of 64Kbs and less are adequate for video catalog access and system management but would provide very limited performance for Internet browsing for more than one or two PCs.

#### **LAN -- Local Area Network**

The school's LAN is used as the means of distribution to the classrooms from the installed media server. For best performance the LAN should have 100-baseT switched segments to each of the school's classrooms. The LAN's switch should be of a high performance design providing full bandwidth across all of its ports simultaneously. The LAN's wiring should meet Cat-5 performance and use either 586 A or B termination standards.

#### **Users PC**

It is recommended the users PC have an Intel P2 processor or equivalent and 64 megabytes of RAM as a minimum. The operating system will need to be Microsoft Windows 95 or Apple OS 7 or higher. The PC will also need to have Windows Media Player 4.5 or higher and Microsoft Internet Explorer 5.5 or higher installed. The users PC will also required access to the school's LAN.

### **Schools or Libraries within a localized school district or system WAN**

#### **Internet Access**

Typical Internet access is assumed to be Fractional T1 or greater to each of the schools. It is further assumed that the school's WAN is managed from a central location that provides firewall, DNS, and NAT type services. A typical installation would require the districts IT staff approve and configure the network to allow remote communication with the installed media servers. Specific requirements are dependent on the districts specific architecture. The school district's IT department can contact Achieve Telecom to obtain more detailed information.